

CLAIMS

What is claimed is:

- 5 1. In screen printing of a surface of an object, a method for preventing ink flow over an edge of the object comprising the steps of:
 - a) placing the object with the edge positioned above a flow of gas, and
 - b) using the flow of gas to prevent ink flow over the edge.
- 10 2. The method as defined by claim 1 wherein step a) includes placing the object on a platen having a support surface for the object, the flow of gas coming from a gas supply in the support surface.
3. The method as defined by claim 2 wherein the object comprises a semiconductor
15 wafer.
4. The method as defined by claim 3 wherein the support surface includes a groove configured to match the edge of the wafer, the gas supply being applied to the groove.
- 20 5. The method as defined by claim 3 wherein the support surface includes a plurality of holes arranged to match the edge of the wafer, the gas supply being applied to the holes.
6. The method as defined by claim 3 wherein the gas comprises air.
- 25 7. The method as defined by claim 3 wherein the gas is inert.
8. The method as defined by claim 3 wherein the gas comprises nitrogen.
9. A method of screen printing to the edge of a surface of an object comprising the steps
30 of:
 - a) providing a platen having a support surface for the object, the surface including a gas supply line,
 - b) placing the object on the platen with the edge overlapping the gas supply line in the platen, and

c) applying a flow of gas from the gas supply over the edge of the object during application of a print ink to thereby oppose the flow of ink over the edge and to the platen.

10. The method as defined by claim 9 wherein the gas supply line includes a groove
5 configured to match the edge of the object.

11. The method as defined by claim 9 wherein the gas supply line includes a plurality of holes arranged to match the edge of the object.

10 12. The method as defined by claim 9 wherein the flow of gas includes air.

13. The method as defined by claim 9 wherein the flow of gas includes inert gas.

14. The method as defined by claim 9 wherein the flow of gas includes nitrogen.

15 15. The method as defined by claim 9 wherein the object comprises a semiconductor wafer.

16. The method as defined by claim 15 wherein the semiconductor wafer comprises a
20 photovoltaic cell.

17. A platen for supporting a wafer during screen printing comprising:

- a) a support surface for supporting the wafer during processing,
- b) a groove around the support surface and configured to match the periphery of the
25 wafer, and
- c) a gas line communicating with the groove for applying gas pressure to the groove during wafer processing.

18. The platen as defined by claim 17 and further including a plurality of holes through
30 the support surface for applying a vacuum for holding a wafer on the support surface.

19. The platen as defined by claim 17 wherein the groove comprises a plurality of holes communicating with the gas line.

20. The platen as defined by claim 17 and further including a plurality of snubbers around the support surface for wafer alignment.